



Tom.Perina@CH2M.com  
04/18/2005 10:49 AM

To Christopher Lichens/R9/USEPA/US@EPA  
cc  
bcc  
Subject RE: Onsite Soils Work Plan Addendum

Chris,

attached is your letter with my suggested revisions, including the indoor air sampling.

Tom

-----Original Message-----

From: Lichens.Christopher@epamail.epa.gov  
[mailto:Lichens.Christopher@epamail.epa.gov]  
Sent: April 18, 2005 10:10 AM  
To: Perina, Tom/RIV  
Subject: Onsite Soils Work Plan Addendum

Tom, please look at my revisions and then let's talk. I haven't added a specific comment about indoor air sampling since you indicated you would work on that this morning. However, I did mention it in Comment 14 in the context of DQOs

Chris

(See attached file: Onsite Soils Work Plan Addendum 2\_4.18.05 comment letter.wpd)



Onsite Soils Work Plan Addendum 2\_4.18.05 comment letter\_TPrev.wpd



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

April 18, 2005

Mr. Chuck McLaughlin  
OPOG Project Coordinator  
de Maximis, Inc.  
5225 Canyon Crest Drive, Building 200, Suite 253  
Riverside, CA 92507

RE: Omega Chemical Superfund Site, On-Site Soils Work Plan Addendum No. 2, dated April 8, 2005

Dear Mr. McLaughlin:

EPA's comments on the subject document prepared by CDM are as follows:

**General Comments**

1. Figure 6 and all subsequent figures do not show the north arrow. All maps should show north to facilitate review.
2. The building names (e.g., Star City, etc.) and street names shown in Plate 1 should be shown on maps (i.e., in figures).
3. Off-property sampling locations should be addressed in this document to avoid later addenda. See comments 4, 11, 13, 14, and Attachment 1.

**Specific Comments**

4. Section 2.0, Objectives. As indicated in the Consent Decree (see Attachment 1), objectives should include site characterization of the extent of contamination resulting from the Omega Site.
5. Figures 3 and 4. The sand unit at the 120-foot elevation extends beneath GP-7 (between 700 and 600 feet on the horizontal scale in Figure 4) but terminates close to OW-8 on Figure 3. Similarly, the sandy unit at the 80-foot elevation beneath GP-7 dips toward OW-8 on Figure 3 but away from OW-8 in Figure 4. While EPA recognizes that there is considerable uncertainty about the extent and dip of the units, the figures should show consistent interpretation of the lithology.
6. Section 3.1, Geologic Framework, second paragraph. The thin sandy unit referred to as a

stringer is not shown on the boring log for GP-2 or on cross-section A-A'. According to the text, this unit should correspond to the SP unit found at a depth of 56 feet at GP-1. It seems that this unit is not present at GP-2 or was not noticed during logging. The text should be revised to reconcile this.

7. Section 3.2, Contaminant Distributions. The speculative statement about other sources of Freons in the second paragraph should be supported by evidence or deleted.

8. Section 3.2, Contaminant Distributions. Consistent with the interpretation of soil gas concentrations, Freon 11 concentrations in the soil should also be shown.

9. Section 3.2, Contaminant Distributions. Discussion of Figure 18 is missing.

10. Section 3.2, Contaminant Distributions. Page 6, first paragraph. Revise the statement about the barrier effect of the capillary fringe to state that it affects non-aqueous phase liquids (NAPL) in this manner, rather than compounds dissolved in infiltrating water. Note that contamination was likely released and exists at the site as both NAPL and dissolved in water.

11. Section 4.0, Proposed Scope of Work and Procedures. Page 7, 3<sup>rd</sup> paragraph. One of the objectives of this investigation is to characterize the extent of contamination. The investigation must determine 1) the extent of contamination, which would be expected to decrease in concentration away from the former Omega property, and/or 2) an indication of other sources, such as by concentrations increasing away from the former Omega property or different composition of contamination away from the former Omega property. The possibility that off-property sources are contributing to contamination from the Omega property must also be accounted for.

12. Section 4.0, Proposed Scope of Work and Procedures. Page 8, 3<sup>rd</sup> paragraph. Discuss the rationale for selection of MP-7 to MP-12.

13. Section 4.0, Proposed Scope of Work and Procedures. Additional soil gas and MIP sampling locations are required as shown in Attachment 2. Two of these locations correspond to SG-13 and SG-14 where contaminant vapors were detected at 6 and 12 feet below ground surface. The soil gas sampling depths at these locations should be 18-70 feet. ~~MIP and h~~Hydropunch (HP) samples may also be required at these locations, depending on the MIP results.

Three soil gas, two MIP, and possibly HP samples are required along the property boundary with Medlin and Sons where high PCE and Freon 11 concentrations were detected in historical shallow soil gas samples. Three additional MIP, and possibly HP, samples are required between the Terra Pave and Bishop Co. buildings, north of MIP-11 and MIP-1.

In addition to planned VOC analyses, soil samples should also be analyzed for density, porosity, moisture content, organic carbon, etc.

Comment 3 of CH2M HILL's February 10, 2005 review memorandum stated that indoor air samples should be collected from two buildings (one south and one north of Putnam Street). Alternatively, additional shallow soil gas samples may be collected near (around) the buildings to

assess the threat to indoor air quality. Depending on the shallow soil gas sample results, indoor air sampling may be required.

Additional off-property locations may also be required depending on the results of currently planned samples. The work plan should include a rationale for the placement of additional off-property sampling locations and criteria for further sampling.

14. Section 5.0, Data Quality Objectives. Page 10, first paragraph. The extent of contamination must be defined prior to the decisions regarding remediation. The 2003 Final Work Plan (Sections 1 and 7) state that one of the objectives of the RI/FS is to estimate the extent and nature of the contaminants. Specific decision statements and decision rules should be included for identifying additional sampling locations, including indoor air samples, based on the initial data.

Each of the seven steps in the DQO process should be explicitly discussed in the work plan addendum, incorporated by reference to other documents, or both. It appears that only the first three steps have been addressed in the work plan addendum.

If you have any questions, please call me at (415) 972-3149.

Sincerely,

Chris Lichens  
Superfund Project Manager

cc: Fred Schauffler, EPA  
Tom Perina, CH2M Hill  
Dave Chamberlin, CDM  
Lori Parnass, CDTSC